

# General Guidance for Small Passenger Vessel Machinery System Submittals

Procedure Number: E1-0T

Revision Date: 03/20/2003

## References

- a. Title 46 Code of Federal Regulations (CFR) 175 through 185 (Subchapter T)

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## Disclaimer

These guidelines were developed by the Marine Safety Center as an aid in the preparation and review of vessel plans and submissions. They were developed to supplement existing guidance. They are not intended to substitute or replace laws, regulations, or other official Coast Guard policy documents. The responsibility to demonstrate compliance with all applicable laws and regulations still rests with the plan submitter. The Coast Guard and the U. S. Department of Homeland Security expressly disclaim liability resulting from the use of this document.

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## Contact Information

If you have any questions or comments concerning this Guidance, please contact the Marine Safety Center by e-mail or phone. Please refer to Procedure Number: E1-0T.

E-mail: [customerservicemsc@msc.uscg.mil](mailto:customerservicemsc@msc.uscg.mil)

Phone: (202) 366-6440

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## General Review Guidance

- ❖ When submitting plans to the Marine Safety Center (MSC) submission should be made in triplicate.
- ❖ An owner may submit any plans, manuals, or calculations to:

Commanding Officer  
U.S. Coast Guard Marine Safety Center  
400 Seventh Street, S.W.  
Washington DC 20590-0001.

- ❖ To submit plans electronically, send plans, manuals, or calculations to:

[ec@msc.uscg.mil](mailto:ec@msc.uscg.mil)

- ❖ Provide a cover letter including:
  - Name, phone number, return address
  - Copy of the Application for Inspection or COI
  - The vessel's name, vessel identification number (VIN), length and number of passengers.
  - The local Coast Guard Marine Safety Office which will perform the inspection.

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- ❖ In accordance with 46 CFR 177.202 machinery system plans and information are required for each vessel intending to be operated as a certificated vessel; additional plans may be required in addition to the following:

\*\*\* (E1-xT) signifies a work instruction specific to small passenger vessels,  
(E1-x) covers all vessels)

- Propulsion and propulsion control, including shaft details- (E1-12T) 46 CFR 182.710/715
- Steering and steering control, including rudder details- (E1-26T) 46 CFR 182.600
- Ventilation diagrams- (E1-29) 46 CFR 182.460/465/470
- Engine Exhaust Diagrams- (E1-7T) 46 CFR 182.425/430
- Fire protection equipment installation- (E1-6) NVIC 6-72  
See: [www.uscg.mil/hq/g-m/mse4/fixedfireboat.htm](http://www.uscg.mil/hq/g-m/mse4/fixedfireboat.htm)
- Fire main system plans and calculations- (E1-09T) 46 CFR 181.300
- Sprinkling System diagram and calculations- NFPA 13 1996
- Fuel Tanks (E1-16T) 46 CFR 182.435/182.440
- Piping systems including:
  - Bilge (E1-2) 46 CFR 182.500
  - Ballast (E1-2) 46 CFR 182.500
  - Hydraulic (E1-12T) 46 CFR 182.710/715
  - Sanitary (E1-24T) 33 CFR 159, 46 CFR 182.700
  - Compressed air (E1-4T) 46 CFR 182.710
- Combustible and flammable liquids/Fuel Oil Systems- (E1-10T)
- Vents and Soundings (E1-29)
- Overflows 46 CFR 179.350
- Hull Penetrations 46 CFR 179.350
- Marine Sanitation Device model number, approval number, connecting wiring and piping (E1-24T) 33 CFR 159, 46 CFR 182.700

- ❖ Additional information is available for the following systems:

- Bow Thruster- (E1-3)
- Compressed Air Systems- (E1-4)
- Cooling System/Keel Cooling System- (E1-5)
- CO2 & Halon (Fixed Gas Ext. Systems)- (E1-6)
- Lubricating Oil Systems- (E1-17)
- Pressure Vessels- (E1-19)
- Potable Water Systems- (E1-21T)
- Sanitary/Sewage Systems- (E1-24T)

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- ❖ Plans and information for machinery systems, at a minimum, shall include the following: (drawings, calculations or manufacturer's information may be provided as necessary to provide the information)
  - The purpose of the system.
  - Its location on the vessel.
  - A list of materials including:
    - Pipe diameters
    - Wall thickness
    - Design pressure
    - Fluid temperature
    - Applicable ASTM material or ANSI component spec.
    - Type, size, design standard, and rating of valves, flanges, and fittings
  - Maximum allowable working pressure.
  - The fluid used in the system, if applicable.
  - Pump rated capacity and pump shutoff head
  - Welding details for piping connections and nonstandard fittings
  - Watertight bulkhead and thru-hull penetration details

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Attachments

None